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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
SINGH, SATWANT K

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>15 March 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,5-10,12-17 and 19</u> is/are rejected.

7)☒ Claim(s) <u>4,11,18 and 20</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This office action is filed in response to the amendment filed on 15 March 2005.

Response to Arguments

2.   Applicant's arguments with respect to claim 1, 8, 15, and 19 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claim 1-3, 5-10, 12-17, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Melo et al. (US 6,431,72) in view of Smith et al. (US 6,502,191.

5.   Regarding Claim 1, Melo et al teach an Internet printing method for a client to

control the printing of a print server via the Internet using the Internet Printing Protocol,

comprising: opening a server site of the print server in a proxy unit (remote printer 260)

on the Internet according to a request from the client and/or the print server (the print

driver at the workstation 200 transmits a single print to the print server, and the print

server may then create and transmit multiples print jobs to at least one of the local

printers 210 and 220, in addition to the remote printer 260) (col. 3, lines 34-38);

accessing the server site using the Internet Printing Protocol with the client (remote

printer 260 may be an IPP-enabled printer having an assigned URI "address" so that

properly formatted print jobs may be sent directly to the printer's address and printed at

the remote printer 260) (col. 4, lines 41-44), and transferring the converted printing

service request to the print server according to the access (transmitting print job to

remote printer 260) (col. 4, lines 34-40).

Melo et al fail to specifically teach an Internet printing method for a client to

control the printing of a print server via the Internet using the Internet Printing Protocol,

comprising: converting a printing service request of the client using the Internet Printing

Protocol into a protocol which allows circumventing the firewall of the print server (IPP is

supported by the Hypertext Transfer Protocol for it's transmissions across the Internet)

(col. 4, lines 18-40.

Smith et al teach an Internet printing method for a client to control the printing of

a print server via the Internet using the Internet Printing Protocol, comprising: converting

a printing service request of the client using the Internet Printing Protocol into a protocol

which allows circumventing the firewall of the print server (circumventing the security

provided by firewalls by using this feature of HTTP to move a document through the

firewall) (col. 2, lines 51-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to have combined the teachings of Melo with the teaching of Smith

to use the IPP protocol that is supported by the HTTP protocol to circumvent the firewall

of the print server, since the HTTP protocol allows for circumventing the security

provided by the firewalls.

6.   Regarding Claim 2, Melo et al teach an Internet printing method, further

comprising: of returning the execution result of the printer server for the printing service

request to the proxy unit, and returning the execution result to the client from the proxy

unit using the Internet Printing Protocol (the internet printing protocol 270 may be bi-

directional, allowing for communication between the printer and the client process

transmitting print jobs to the printer) (col. 4, lines 11-17).

7.   Regarding Claim 3, Melo et al teach an Internet printing method, further

comprising: connecting the proxy unit and the print server according to the connection

request from the print server (device drivers may include a network driver to enable

communication with other devices on the private data communication network 180 or

with devices on the public data communication network 250) (col. 2, lines 31-33, and

lines 47-59).

8.   Regarding Claim 5, Melo et al teach an Internet printing method, further

comprising: connecting the proxy unit and the print server according to the connection

request from the print server corresponding to the printing command (device drivers

may include a network driver to enable communication with other devices on the private

data communication network 180 or with devices on the public data communication

network 250) (col. 2, lines 31-33, and lines 47-59).

Melo et al fail to specifically teach an Internet printing method, further comprising:

transmitting a printing command from the client to the print server using a protocol

which can circumvent the firewall (IPP is supported by the Hypertext Transfer Protocol

for it's transmissions across the Internet) (col. 4, lines 18-40).

Smith et al teach an Internet printing method, further comprising: transmitting a

printing command from the client to the print server using a protocol which can

circumvent the firewall (circumventing the security provided by firewalls by using this

feature of HTTP to move a document through the firewall) (col. 2, lines 51-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to have combined the teachings of Melo with the teaching of Smith

to use the IPP protocol that is supported by the HTTP protocol to circumvent the firewall

of the print server, since the HTTP protocol allows for circumventing the security

provided by the firewalls.

9.   Regarding Claim 6, Melo et al teach an Internet printing method, further

comprising: a step of transmitting a printing command from the client to the proxy unit

(remote printer 260) using the Internet Printing Protocol (transmit print jobs to printers

through the public data communication network 250 using the IPP in response to receipt

of a single print job from the workstation 200) (col. 4, lines 53-58); and connecting the

proxy unit and the print server according to the connection request from the print server

corresponding to the transferred printing command (device drivers may include a

network driver to enable communication with other devices on the private data

communication network 180 or with devices on the public data communication network

250) (col. 2, lines 31-33, and lines 47-59).

Melo et al fail to teach an Internet printing method, further comprising:

transferring the printing command from the proxy unit to the print server using a protocol

which can circumvent the firewall (IPP is supported by the Hypertext Transfer Protocol

for it's transmissions across the Internet) (col. 4, lines 18-40).

Smith et al teach an Internet printing method, further comprising: transferring the

printing command from the proxy unit to the print server using a protocol which can

circumvent the firewall (circumventing the security provided by firewalls by using this

feature of HTTP to move a document through the firewall) (col. 2, lines 51-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to have combined the teachings of Melo with the teaching of Smith

to use the IPP protocol that is supported by the HTTP protocol to circumvent the firewall

of the print server, since the HTTP protocol allows for circumventing the security

provided by the firewalls.

10.   Regarding Claim 7, Melo et al teach an Internet printing method, further

comprising: constantly connecting the proxy unit and the print server according to the

connection request from the print server (device drivers may include a network driver to

enable communication with other devices on the private data communication network

180 or with devices on the public data communication network 250) (col. 2, lines 31-33,

·and lines 47-59).

11.   Regarding Claim 8, Melo et al teach an Internet printing system for a client to

control the printing for a print server via the Internet using the Internet Printing Protocol,

comprising: the client that communicates at least by using the Internet Printing Protocol

(workstation computer 100); the print server that is protected by a firewall on the

Internet and for executing a printing request (Fig. 2) (devices coupled to the private

data communication network 180 may communicate with devices outside the private

data communication network 180 through a gateway 240 which includes a firewall) (col.

2, lines 36-43); and a proxy unit (remote printer 260) that opens a server site of the print

server according to a request the client and/or the print server (the print driver at the

workstation 200 transmits a single print to the print server, and the print server may then

create and transmit multiples print jobs to at least one of the local printers 210 and 220,

in addition to the remote printer 260) (col. 3, lines 34-38), and transfers the request to

the print server (the internet printing protocol 270 is capable of transmitting a print job

270 directly from the computer 200, through the firewall in the internet gateway 240 and

across the public data communication network 250 to a remote printer 260) (col. 4, lines

34-40).

12.   Melo et al fail to teach Internet printing system for a client to control the printing

for a print server via the Internet using the Internet Printing Protocol, comprising:

converting the printing service request of the client using the Internet Printing Protocol

into a protocol which allows circumventing the firewall of the print server at the access

of the client to the server site by the Internet Printing Protocol (IPP is supported by the

Hypertext Transfer Protocol for it's transmissions across the Internet) (col. 4, lines 18-

40).

        Smith et al teach Internet printing system for a client to control the printing for a

print server via the Internet using the Internet Printing Protocol, comprising: converting

the printing service request of the client using the Internet Printing Protocol into a

protocol which allows circumventing the firewall of the print server at the access of the

client to the server site by the Internet Printing Protocol (circumventing the security

provided by firewalls by using this feature of HTTP to move a document through the

firewall) (col. 2, lines 51-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to have combined the teachings of Melo with the teaching of Smith

to use the IPP protocol that is supported by the HTTP protocol to circumvent the firewall

of the print server, since the HTTP protocol allows for circumventing the security

provided by the firewalls.

13.   Claim 9 is rejected for the same reason as claim 2.

14.   Claims 10 and 17 are rejected for the same reason as claim 3.

15.   Claim 12 is rejected for the same reason as claim 5.

16.   Claim 13 is rejected for the same reason as claim 6.

17.   Claim 14 is rejected for the same reason as claim 7.

18.   Regarding Claim 15, Melo et al teach a proxy unit for a client to control the

printing for a print server via the Internet using the Internet Printing Protocol,

comprising: a server site of the print server to be opened according to a request from

the client and/or the print server (the print driver at the workstation 200 transmits a

single print to the print server, and the print server may then create and transmit

multiples print jobs to at least one of the local printers 210 and 220, in addition to the

remote printer 260) (col. 3, lines 34-38); and for transferring the request to print server

(the internet printing protocol 270 is capable of transmitting a print job 270 directly from the computer 200, through the firewall in the internet gateway 240 and across the public data communication network 250 to a remote printer 260) (col. 4, lines 34-40).

Melo et al fail to teach a proxy unit for a client to control the printing for a print server via the Internet using the Internet Printing Protocol, comprising: an exchanger for converting a printing service request of the client by the Internet Printing Protocol to a protocol which allows circumventing the firewall of print server at the access of client to server site by Internet Printing Protocol (IPP is supported by the Hypertext Transfer Protocol for it's transmissions across the Internet) (col. 4, lines 18-40).

Smith et al teach a proxy unit for a client to control the printing for a print server via the Internet using the Internet Printing Protocol, comprising: an exchanger for converting a printing service request of the client by the Internet Printing Protocol to a protocol which allows circumventing the firewall of print server at the access of client to server site by Internet Printing Protocol (circumventing the security provided by firewalls by using this feature of HTTP to move a document through the firewall) (col. 2, lines 51-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Melo with the teaching of Smith to use the IPP protocol that is supported by the HTTP protocol to circumvent the firewall of the print server, since the HTTP protocol allows for circumventing the security provided by the firewalls.

19.   Regarding Claim 16, Melo et al teach a proxy unit, wherein exchanger receives

an execution result of print server for printing service request and returns to the client by

the Internet Printing Protocol (the internet printing protocol 270 may be bi-directional,

allowing for communication between the printer and the client process transmitting print

jobs to the printer) (col. 4, lines 11-17).

20.   Regarding Claim 19, Melo et al teach a printer server for a client to control

printing via the Internet using the Internet Printing Protocol, comprising: a network

interface unit for communicating (Fig. 2) (gateway 240) (col. 2, lines 36-43); and a

processing unit that requests to a proxy unit installed on the Internet to open a server

site of the print server (the print driver at the workstation 200 transmits a single print to

the print server, and the print server may then create and transmit multiples print jobs to

at least one of the local printers 210 and 220, in addition to the remote printer 260) (col.

3, lines 34-38), and executes the printing service request (the internet printing protocol

270 is capable of transmitting a print job 270 directly from the computer 200, through

the firewall in the internet gateway 240 and across the public data communication

network 250 to a remote printer 260) (col. 4, lines 34-40).

21.   Melo et al fail to teach a printer server for a client to control printing via the

Internet using the Internet Printing Protocol, comprising: receiving a printing service

request from the proxy unit where a printing service request of the client by Internet

Printing Protocol is converted into a protocol which allows circumventing the firewall of

the print server at the access of the client to the server site by the Internet Printing

Protocol (IPP is supported by the Hypertext Transfer Protocol for it's transmissions across the Internet) (col. 4, lines 18-40).

Smith et al teach a printer server for a client to control printing via the Internet using the Internet Printing Protocol, comprising: receiving a printing service request from the proxy unit where a printing service request of the client by Internet Printing Protocol is converted into a protocol which allows circumventing the firewall of the print server at the access of the client to the server site by the Internet Printing Protocol (circumventing the security provided by firewalls by using this feature of HTTP to move a document through the firewall) (col. 2, lines 51-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Melo with the teaching of Smith to use the IPP protocol that is supported by the HTTP protocol to circumvent the firewall of the print server, since the HTTP protocol allows for circumventing the security provided by the firewalls.

Allowable Subject Matter

22.   Claims 4, 11, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Keeney et al. (US 6,748,471) disclose methods and apparatus for requesting and receiving print jobs over a communications network.

Machida (US 2002/0140971) discloses a server storing a plurality of printer drivers corresponding respectively to a plurality of printers connected to a network.
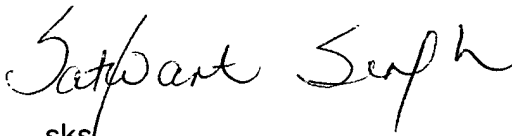
Schaeffer (US 2004/0105122) discloses a printer control and information management system employing a numerous individual satellite modules.
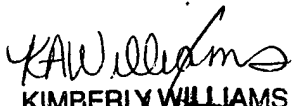
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Satwant K. Singh
Examiner
Art Unit 2626

sks

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER